



## MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue Victorville, CA 92392-2310  
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

### PERMIT TO OPERATE

E012912

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

**EXPIRES LAST DAY OF: NOVEMBER 2024**

#### OWNER OF OPERATOR (Co.#84)

NTC - Public Works  
Bldg 602, 5th Street  
Fort Irwin, CA 92310

#### EQUIPMENT LOCATION (Fac.#589)

NTC - Dir. of Public Works, Mission Related  
Bldg. 602, 5th street  
Fort Irwin, CA 923105085

#### Description:

DIESEL IC ENGINE, EMERGENCY FIRE PUMP (NASA COMPLEX, BUILDING 21004) consisting of: A certified Tier III Diesel Engine, EPA Family GJDXL13.5103, manufactured in 2016 with no exhaust after-treatment device installed. Exhaust flow is 1400 acfm at 961 degrees Fahrenheit through a 9.5 foot tall by 6 inch diameter stack:

One John Deere, Diesel fired internal combustion engine Model No. 6068HFC48A and Serial No. PE6068N007584, Turbo Charged, After Cooled, Electronic Control Module, Compression-Ignited, producing 315 bhp with 6 cylinders at 1760 rpm while consuming a maximum of 15.0 gal/hr. This equipment powers a Clarke Pump Model No. JU6H-UFAD98 and Serial No. 18-2533624, rated at 2500 gpm at 120 psig.

#### EMISSIONS RATES

Emission Type	Est. Max Load	Unit
CO	0.40	gm/bhp-hr
NOx	2.69	gm/bhp-hr
PM10	0.06	gm/bhp-hr
PM2.5	0.06	gm/bhp-hr
SOx	0.005	gm/bhp-hr
VOC	0.06	gm/bhp-hr

#### CONDITIONS:

Fee Schedule: 7 (g)

Rating: 1 device

SIC: 9711

SCC: 20200102

Location/UTM(Km):  
529E/3902N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NTC - Public Works  
Attn: Air Resources Manager  
  
Fort Irwin, CA 92310

By: **COPY**  
**Brad Poiriez**  
Air Pollution Control Officer

1. This equipment shall be installed, operated and maintained in strict accordance with those recommendations of the manufacturer/supplier and/or sound engineering principles which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.  
[40 CFR 60.4211(a)]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.  
[17 CCR 93115.10(d)]

3. This engine shall only be fired on diesel fuel that meets the following requirements, or an alternative fuel approved by the ATCM for Stationary CI Engines:

- a. Ultra-low sulfur concentration of 0.0015% (15 ppm) or less, on a weight per weight basis; and,
- b. A cetane index or aromatic content, as follows:

- 1. A minimum cetane index of 40; or,
- 2. A maximum aromatic content of 35 volume percent.

[17 CCR 93115.5(a), 40 CFR 80.510(c) and 40 CFR 60.4207(b)]

Note: Use of CARB certified ULSD fuel satisfies the above requirements.

4. The owner/operator shall maintain an operations log for this unit current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel upon request. The log shall include, at a minimum, the information specified below:

- a. Date of each use and duration of each use (in hours per hour meter);
- b. Reason for use (regular testing & maintenance, NFPA maintenance & testing, emergency, required emission testing);
- c. Rolling consecutive twelve month period operation in terms of fuel consumption (in gallons) and/or total hours;
- d. Records of all maintenance and inspections; and,
- e. Fuel sulfur concentration (the owner/operator may use the supplier's certification of sulfur content if it is maintained as part of this log).

[17 CCR 93115.10(f); 40 CFR 70.6(a)(3)(ii)(b), and 40 CFR 60.4214]

5. This unit shall be limited to emergency use only, defined as in response to a fire or when commercially available power has been interrupted. In addition, this unit shall be operated no more than 1 hour per day and not more than 50 hours per rolling consecutive twelve month period for testing and maintenance. Time required for source testing will not be counted toward the 50 hour rolling annual limit.

[District Rule 1320 (hour limiting); 17 CCR 93115.6(b)]

6. The hour limits indicated in condition 5 above do not apply to in-use emergency fire pump assemblies that are driven directly by stationary diesel-fueled CI engines and only operated the number of hours necessary to comply with the testing requirements of National Fire Protection Association (NFPA) 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," 2002 edition, which is incorporated herein by reference.

[17 CCR 93115.3(n)]

7. This engine is subject to the requirements of Title 17 CCR 93115, the Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition Engines and 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (NSPS). In the event of a conflict between these conditions and the ATCM or NSPS, the more stringent requirements shall govern.

[District Rule 1302]

8. This entire facility (MDAQMD Facility no. 589 - NTC - Dir. of Public Works, Mission Related) shall not emit any regulated air pollutant or any pollutant listed under section 112(b) of the Clean Air Act listed below in excess of the following limits in any consecutive 12 month period to remain below the USEPA's Synthetic Minor - 80% (SM-80) threshold:

- a. Oxides of Nitrogen (NOx): 20 tons per consecutive twelve (12) month period, measured as NO<sub>2</sub>;
- b. Oxides of Sulfur (SOx): 20 tons per consecutive twelve (12) month period;
- c. Volatile Organic Compounds (VOC): 20 tons per consecutive twelve (12) month period;
- d. Carbon Monoxide (CO): 80 tons per consecutive twelve (12) month period;
- e. Hydrogen Sulfide (H<sub>2</sub>S): 8 tons per consecutive twelve (12) month period;

- f. Lead (Pb): 0.48 tons per consecutive twelve (12) month period; and,
- g. Particulate Matter 10 microns and less (PM10): 12.0 tons per consecutive twelve (12) month period;
- h. Any single Hazardous Air Pollutant (HAP): 8 tons per consecutive twelve (12) month period; and,
- i. All HAPs combined: 20 tons per consecutive twelve (12) month period.

For the purposes of implementation of the Title I (Part D) Nonattainment New Source Review (nonattainment NSR), Title I (Part C) Prevention of Significant Deterioration (PSD), and Title V Operating Permit Programs under the Clean Air Act, Facility refers to a stationary source, or group of stationary sources that are located on one or more contiguous or adjacent properties that are owned, operated, supervised, or controlled by one or more Department of Defense (DoD) component(s) that were disaggregated during the course of major source determination(s), based upon appropriate industrial groupings and support facility relationships. Compliance with these limits shall be demonstrated through the submission of an installation-wide Comprehensive Emission Inventory (CEI) for all emitted regulated air pollutants or any pollutant listed under section 112(b) of the Clean Air Act (including 12 month emissions summary). Exceedance of these emission limits may trigger offsets, BACT, and/or require submission of a Title V permit application. [District Rules 1302 and 1303, 40 CFR 51.165, 40 CFR 52.21(b), 40 CFR 70.2 and "Major Source Determinations for Military Installations under the Air Toxics, New Source Review, and Title V Operating Permit Programs of the Clean Air Act," memorandum from John S. Seitz, Director, Office of Air Quality Planning and Standards, (Aug. 2, 1996)]

9. This entire facility (MDAQMD Facility no. 589 - NTC - Dir. of Public Works, Mission Related) shall not emit any Hazardous Air Pollutants (HAP) listed in or pursuant to Section 112(b) of the Clean Air Act in excess of the following limits in any consecutive 12 month period to remain below the USEPA's Synthetic Minor - 80% (SM-80) threshold:

- a. Any single Hazardous Air Pollutant (HAP): 8 tons per consecutive twelve (12) month period; and,
- b. All HAPs combined: 20 tons per consecutive twelve (12) month period.

For the purposes of determining the applicability of Section 112 air toxics requirements under the Clean Air Act, Facility refers to a stationary source, or group of stationary sources that are located within a contiguous area and under common control. Compliance with these limits shall be demonstrated through the submission of an installation-wide Comprehensive Emission Inventory (CEI) for all emitted pollutants listed under section 112 (b) (including 12 month emissions summary). Exceedance of these emission limits may trigger National Emission Standards for Hazardous Air Pollutants (NESHAP) or Maximum Achievable Control Technology (MACT) standards.

[40 CFR 63.2]

10. A Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants located at this military installation (including, but not limited to, MDAQMD Facility nos. 589, 2806, 3023, 3280, 3534, and 3903) must be submitted to the District, in a format approved by the District, upon District request. For the purposes of CEI, Facility is defined as every structure, appurtenance, installation, and improvement on land which is associated with a source of air releases or potential air releases of a hazardous material. [District Rule 107(b), H&S Code 39607, 44304 and 44341-44342]